

## **Historic, Archive Document**

Do not assume content reflects current scientific knowledge, policies, or practices.



aTD224  
.N2N48



United States  
Department of  
Agriculture

Soil  
Conservation  
Service

Reno  
Nevada



# Nevada Water Supply Outlook

February 1, 1987





# Foreward

## How Forecasts Are Made

Most of the annual streamflow in the Western United States originates as snowfall. This snowfall accumulates high in the mountains during winter and early spring. As the snowpack accumulates, hydrologists estimate the runoff that will occur when it melts. Predictions are based on careful measurements of snow water equivalent at selected index points. Precipitation, temperature, soil moisture and antecedent streamflow data are viewed in conjunction with snowpack data to prepare runoff forecasts. This report presents a comprehensive picture of water supply outlook conditions for areas dependent upon surface runoff. It includes selected streamflow forecasts, summarized snowpack and precipitation data, reservoir storage data and narratives describing current conditions.

Streamflow forecasts are cooperatively generated by Soil Conservation Service and National Weather Service hydrologists. Forecasts become more accurate as more data affecting runoff becomes known. For this reason, forecasts are issued that reflect three future precipitation conditions — Below Normal, Average, and Above Normal. These forecasts are termed reasonable minimum, most probable, and reasonable maximum. Actual streamflow can be expected to fall between the lower and upper forecast values eight out of ten years.

Snowpack data are obtained by using a combination of manual and automated measurement methods. Manual readings of snow depth and water equivalent are taken at locations called snow courses on a monthly or semi-monthly schedule during the winter. In addition, snow water equivalent, precipitation, temperature, and other parameters are monitored on a daily basis and transmitted via radio telemetry to central data collection facilities. Both monthly and daily data are used to project snowmelt runoff.

## For More Information

Copies of Monthly Water Supply Outlook Reports and other reports may be obtained from the states listed below. Because of the limited space, snow survey measurements are not published in monthly reports. An annual snow survey data summary is published by the Soil Conservation Service for each of the western states. Historical snow survey data may be obtained at those same offices.

STATE	ADDRESS
Alaska	201 East 9th Ave., Suite 300, Anchorage, AK 99501-3687
Arizona	201 East Indianola, Suite 200, Phoenix, AZ 85012
Colorado	2490 West 26th Ave., Denver, CO 80211
New Mexico	517 Gold Ave. S.W., Room 3301, Albuquerque, NM 97102
Idaho	304 North 8th Street, Room 345, Boise, ID 83702
Montana	10 East Babcock, Room 443, Federal Building, Bozeman, MT 59715
Nevada	1201 Terminal Way, Room 219, Reno, NV 89502
Oregon	1220 Southwest 3rd Ave., Room 1640, Portland, OR 97208
Utah	4402 Federal Building, 125 South State Street, Salt Lake City, UT 84147
Washington	360 U.S. Court House, Spokane, WA 99201
Wyoming	Federal Building, 100 East "B" Street, Casper, WY 82601

In addition to state reports, a Water Supply Outlook for the Western United States is published by the Soil Conservation Service and National Weather Service monthly, January through May. Reports may be obtained from the Soil Conservation Service, West National Technical Center, 511 Northwest Broadway, Room 547, Portland, OR 97209.

Published by other agencies:

Water Supply Outlook Reports prepared by other agencies include: California — Snow Survey Branch, California Department of Water Resources, P.O. Box 388, Sacramento, CA 95802; British Columbia — The Ministry of Environment, Water Investigations Branch, Parliament Buildings, Victoria, British Columbia, V8V 1X5; Yukon Territory — Department of Indian and Northern Affairs, Northern Operations Branch, 200 Range Road, Whitehorse, Yukon Territory, Y1A 3V1; Alberta, Environment Technical Services Division, 9820 106th St., Edmonton, Alberta T5K 2J6.

# **Nevada Water Supply Outlook and Federal - State - Private Cooperative Snow Surveys**

## **Issued By**

Wilson Scaling  
Chief  
Soil Conservation Service  
Washington, DC 20013

## **Released By**

Charles Adams  
State Conservationist  
Soil Conservation Service  
Reno, Nevada 89502

## **Prepared By**

Chris Pacheco  
Water Supply Specialist  
Soil Conservation Service  
1201 Terminal Way, Second Floor  
Reno, Nevada 89502

## **In Cooperation With**

Roland D. Westergard  
Director  
Department of Conservation &  
Natural Resources  
Carson City, Nevada 89701

# TABLE OF CONTENTS

**State Streamflow Prospects Map-----01**

**State General Outlook-----02**

## **Basin Outlook and Conditions**

**Tahoe & Truckee Basins-----04**

**Carson & Walker Basins-----06**

**Humboldt Basin-----08**

**Snake & Owyhee Basins-----10**

**Eastern Nevada-----12**

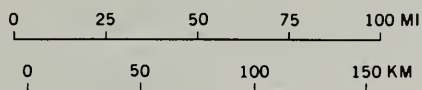
**Northern Great Basin-----14**

**Southern Nevada-----16**

**Snow Data Measurements-----18**

**Additional Information-----21**





APRIL 1985 4-R-39131



## GENERAL OUTLOOK

### SUMMARY:

SNOWPACK ACCUMULATIONS FOR THE STATE REMAIN WELL BELOW AVERAGE. WATER YEAR PRECIPITATION RANGES FROM BELOW AVERAGE TO WELL BELOW AVERAGE. RESERVOIR STORAGE IN THE STATE IS ABOVE AVERAGE. STREAMFLOW FORECASTS INDICATE FLOWS WILL BE WELL BELOW AVERAGE FOR THE APRIL-JULY FORECAST PERIOD.

### SNOWPACK:

As of February 1, snowpacks remain well below average. Water contents range from 30% to 64%. Snowpacks in the Tahoe-Truckee, Carson-Walker and Humboldt basins are between 30% and 40% of average. Water contents in the Eastern Nevada, Snake and eastern portion of the Northern Great basins range from 43% to 48% of normal. The Owyhee and the western portion of the Northern Great Basin are 57% and 64%, respectively. Snowpacks which provide water to the Virgin River are 48% of average.

### PRECIPITATION:

January precipitation was well above average to well below average. The Tahoe-Truckee, Carson-Walker, Northern Great and Snake-Owyhee basins were between 52% and 70% of average. Both the Eastern Nevada and Humboldt basins were 73% of average. Southern Nevada recorded 137% of the month's average. Year to date precipitation ranged from 25% to 52% for the state, except in Southern Nevada where 79% of the average precipitation has fallen since October 1.

### RESERVOIRS:

Reservoir storage in the state is above average. Storage in the Carson-Walker basin is near normal at 106% of average. Water stored in the Tahoe-Truckee basin is above average at 123% of average. Reservoir storage in the Humboldt and Snake-Owyhee basins are much above average. Total storage in the seven major lakes and reservoirs is 118% of average and 12% over last year with 946,700 acre feet of stored water.

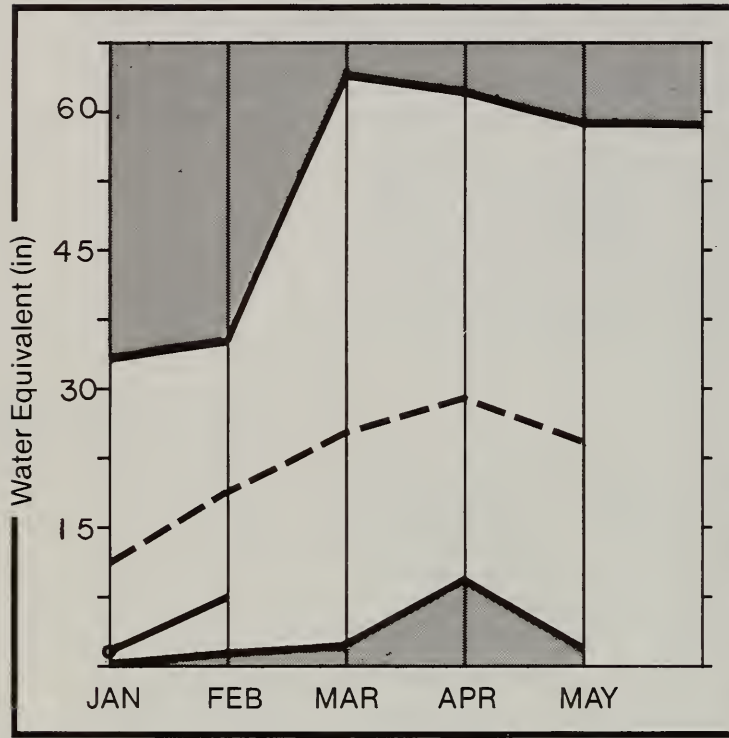


## STREAMFLOW:

Streamflows for the state are expected to be well below average. Streamflows in the Tahoe-Truckee Basin will probably flow at 44% to 64% of average. Carson-Walker Basin streamflows are estimated at 32% to 53% of average. Forecasts for the Northern Great Basin project flows ranging from 40% to 77% of average. Values for Humboldt Basin streamflows range from 40% to 69%. Flows in the Snake-Owyhee Basin are forecast between 40% and 59% of normal. Streamflows in Eastern Nevada are to be 56% to 76% of average.

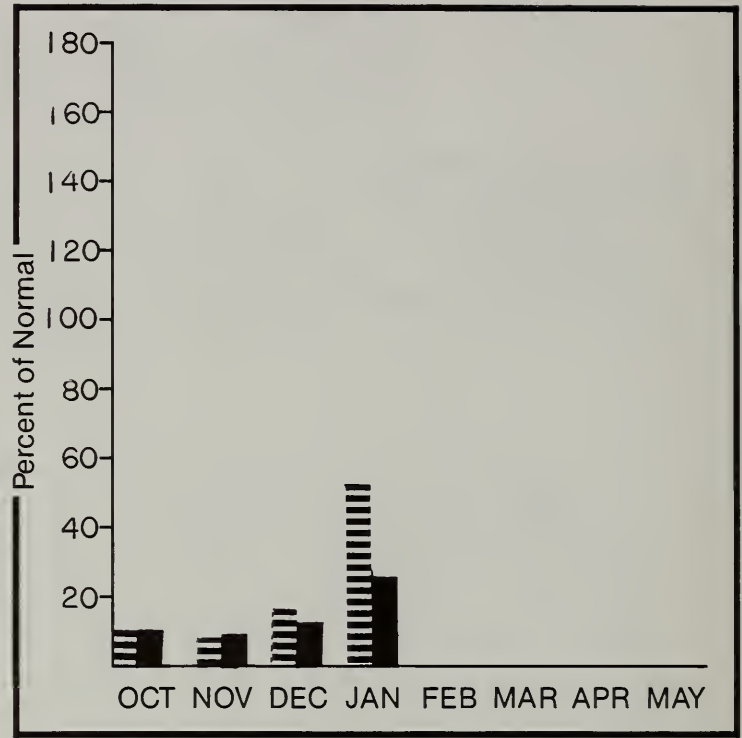
# TAHOE & TRUCKEE BASINS

Mountain snowpack\* (inches)


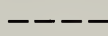





\*Based on selected stations

Precipitation\* (percent of normal)



\*Based on selected stations

Maximum  Average   
Minimum  Current 

Monthly precipitation  Year to date precipitation 

## WATER SUPPLY OUTLOOK:

Snow water contents for February are well below average. The Lake Tahoe Basin has about 39% of the average snowpack and 52% of the snowpack present last year. The Truckee basin snowpack is 35% of normal and 44% of last year's water content at this time. January precipitation amounted to 52% of normal compared to 72% of average on February 1, 1986. Year to date precipitation is 25% of the 1961-85 average. At this same time last year, it was 81% of normal. Reservoir storage is 23% above average for this date. Streamflow forecast indicate flows will be well below average during the April-July forecast period. The Truckee River at Farad is expected to flow at 47% of normal.

For more information contact your local Soil Conservation Service office.

# TAHOE & TRUCKEE BASINS

## STREAMFLOW FORECASTS

FORECAST POINT	FORECAST PERIOD	25 YR. AVG. (1000AF)	MOST PROBABLE (1000AF)	MOST PROBABLE (% AVG.)	REAS. MAX. (1000AF)	REAS. MAX. (% AVG.)	REAS. MIN. (1000AF)	REAS. MIN. (% AVG.)
LAKE TAHOE RISE (assume gates closed)	APR-HIG	1.48	0.7	47	2.0	135	.2	13
TRUCKEE RIVER at Farad 2	APR-JUL	284.7	130.0	46	312.0	110	51.0	18
LITTLE TRUCKEE RIVER above Boca 2	APR-JUL	91.5	40.0	44	101.0	110	10.0	11
PYRAMID LAKE RISE (LOW 12/1/85)	LOW-HIG	1.2	-0.9	35	0.0	62	-2.0	5
STEAMBOAT CREEK at Steamboat 2	APR-JUL	7.1	4.3	61	8.0	113	1.0	14
SAGEHEN CREEK, Ca	APR-JUL	6.5	3.3	51	8.0	123	1.0	15
GALENA CREEK nr Steamboat, Nv	APR-JUL	4.5	2.9	64	5.0	111	1.0	22

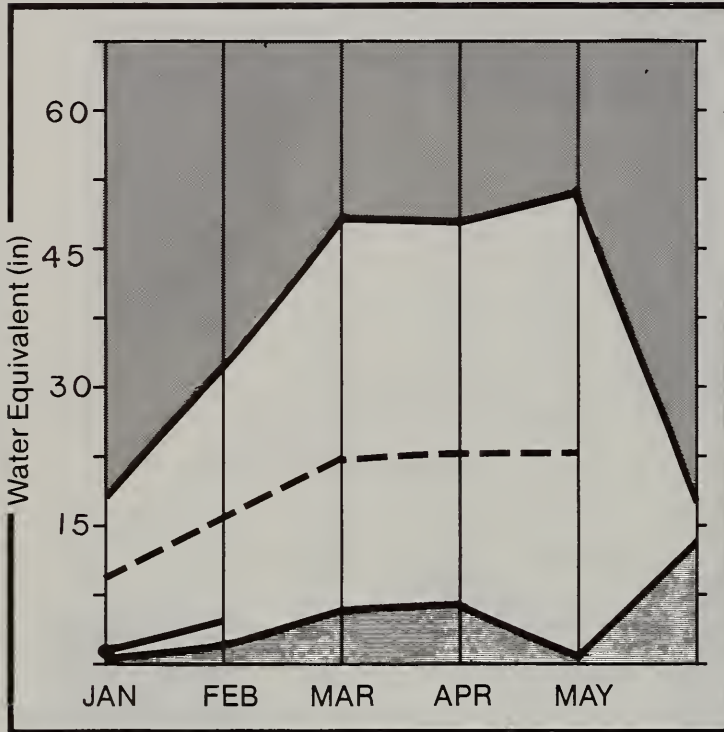
RESERVOIR STORAGE (1000AF)					WATERSHED SNOWPACK ANALYSIS		
RESERVOIR	USEABLE CAPACITY	USEABLE STORAGE THIS YEAR	USEABLE STORAGE LAST YEAR	USEABLE STORAGE AVG.	WATERSHED	NO. COURSES AVG'D	THIS YEAR AS % OF LAST YR. AVERAGE
BOCA RESERVOIR	40.9	22.7	23.4	18.5	LAKE TAHOE RISE	14	52 39
LAKE TAHOE	744.6	468.5	469.7	405.1	TRUCKEE BASIN	16	43 35
PROSSER RESERVOIR	28.6	9.2	9.1	8.4	LITTLE TRUCKEE RIVER	3	47 37
STAMPEDE RESERVOIR	226.5	102.7	121.9	123.9	SAGE HEN CREEK	5	53 44
					GALENA CREEK	3	36 28
					STEAMBOAT DRAINAGE	2	32 23
					PYRAMID LAKE	30	46 37

1 - Reas. max. and reas. min. forecasts are for 5% and 95% exceedance levels and also (2) below.  
2 - Corrected for upstream diversions or changes in reservoir storage.  
The average is computed for the 1961-85 base period.



# CARSON & WALKER BASINS

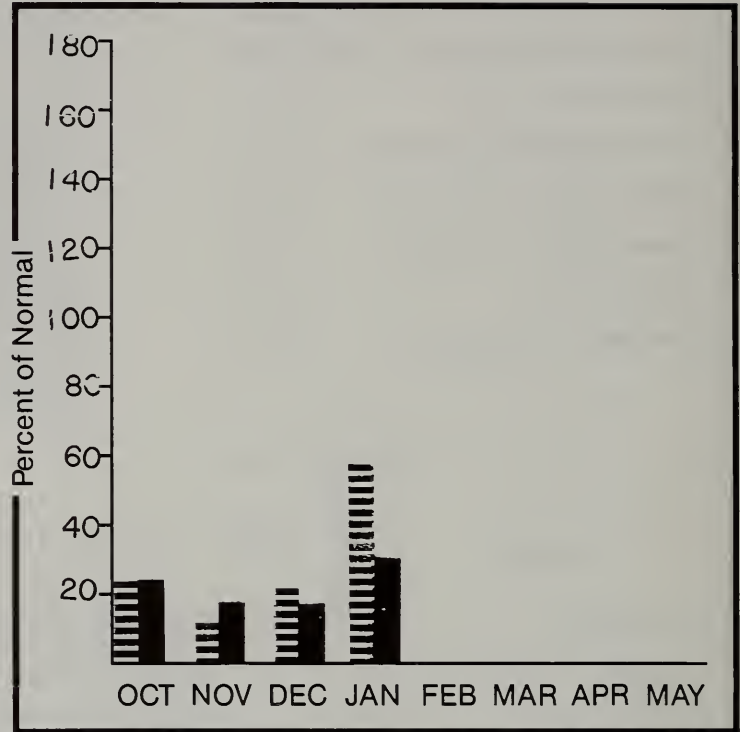
**Mountain snowpack\* (inches)**





\*Based on selected stations

Maximum  Average   
 Minimum  Current 

**Precipitation\* (percent of normal)**



\*Based on selected stations

Monthly precipitation  Year to date precipitation 

## WATER SUPPLY OUTLOOK:

Snowpack accumulations are well below average. The Carson and Walker River basins have the lowest snow water content percentages in Nevada at 32% and 30%, respectively. Snowpack this year is about 40% of last year's at this time. January precipitation is 57% of normal and water year accumulation is 30% of average. January precipitation in 1986 was 47% of normal and water year accumulation was 86% of average. Water storage at Bridgeport, Lahontan and Topaz is 18% higher than last year and 6% more than normal storage. Streamflow forecasts are still well below normal at 32% to 53% of average.

For more information contact your local Soil Conservation Service office.

# CARSON & WALKER BASINS

## STREAMFLOW FORECASTS

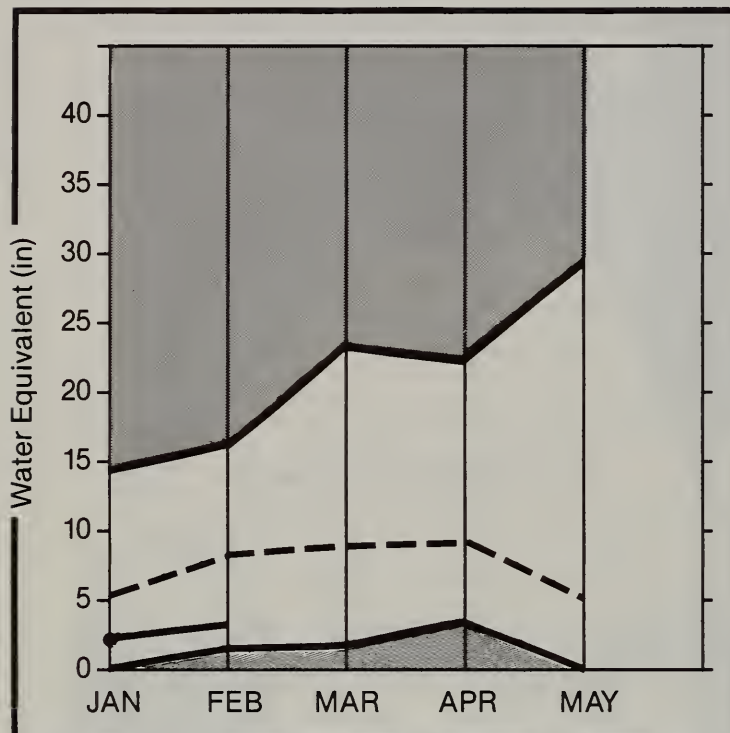
FORECAST POINT	FORECAST PERIOD	25 YR. AVG. (1000AF)	MOST PROBABLE (1000AF)	MOST PROBABLE (% AVG.)	REAS. MAX. (1000AF)	REAS. MAX. (% AVG.)	REAS. MIN. (1000AF)	REAS. MIN. (% AVG.)
EF CARSON RIVER nr Gardnerville, Nv	APR-JUL	198.4	104.0	52	171.0	86	37.0	19
WF CARSON RIVER at Woodfords, Ca	APR-JUL	56.7	30.0	53	49.0	86	11.0	19
CARSON RIVER near Carson City, Nv	APR-JUL	198.3	70.0	35	183.0	92	30.0	15
CARSON RIVER near Ft. Churchill, Nv	APR-JUL	182.4	60.0	33	180.0	99	20.0	11
EAST WALKER RIVER nr Bridgeport 2	APR-AUG	76.8	30.0	39	75.0	98	10.0	13
WEST WALKER RIVER near Coleville, Ca	APR-JUL	154.6	65.0	42	128.0	83	17.0	11
WALKER LAKE RISE (LOW 1/6/86)	LOW-HIG	-0.0	-0.7	38	0.0	101	-2.7	10

RESERVOIR STORAGE (1000AF)					WATERSHED SNOWPACK ANALYSIS		
RESERVOIR	USEABLE CAPACITY	USEABLE STORAGE THIS YEAR	USEABLE STORAGE LAST YEAR	USEABLE STORAGE AVE.	WATERSHED	NO. COURSES AVE'D	THIS YEAR AS % OF LAST YR. AVERAGE
BRIDGEPORT RESERVOIR	42.5	33.1	22.8	28.3	E. CARSON RIVER	7	39 31
LAHONTAN RESERVOIR	295.1	198.6	173.4	194.6	W. CARSON RIVER	4	35 28
TOPAZ RESERVOIR	59.4	31.9	27.2	26.9	CARSON Rv. at Carson City	5	40 31
					CARSON Rv. at Ft. Churchi	5	40 31
					E. WALKER Rv. nr Bridgepo	7	42 33
					W. WALKER Rv. nr Colevill	8	40 30
					WALKER LAKE RISE	10	38 30

- 1 - Reas. max. and reas. min. forecasts are for 5% and 95% exceedance levels and also (2) below.  
2 - Corrected for upstream diversions or changes in reservoir storage.  
The average is computed for the 1961-85 base period.

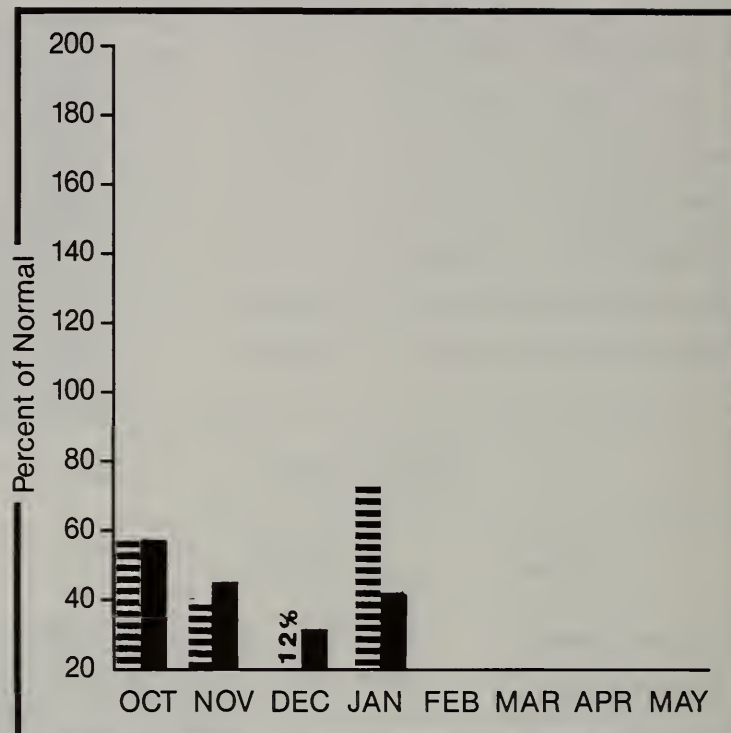
# HUMBOLDT BASIN

**Mountain snowpack\*** (inches)



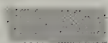
\*Based on selected stations

**Precipitation\*** (percent of normal)

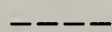


\*Based on selected stations

Maximum



Average



Minimum



Current



Monthly precipitation



Year to date precipitation



## WATER SUPPLY OUTLOOK:

Snow water accumulations are still well below average. Snowpack in the Upper Humboldt Basin is 38% of average and 36% of last year's February 1 snow water content. The Lower Humboldt Basin is about 39% of average and 48% of the snowpack present last year. Monthly precipitation for January was below average at 73% of normal and water year totals were well below average at 42% compared to 67% and 89%, respectively, last year. Reservoir storage at Rye Patch is 37% above average. On February 1, no water was being released from the reservoir. Forecasts for streamflows in the Humboldt Basin remain well below average. The Humboldt River at Palisade is expected to flow at 46% of normal.

For more information contact your local Soil Conservation Service office.



# HUMBOLDT BASIN

## STREAMFLOW FORECASTS

FORECAST POINT	FORECAST PERIOD	25 YR. AVG. (1000AF)	MOST PROBABLE (1000AF)	MOST PROBABLE (% AVG.)	REAS. MAX. (1000AF)	REAS. MAX. (% AVG.)	REAS. MIN. (1000AF)	REAS. MIN. (% AVG.)
HUMBOLDT RIVER at Palisade	APR-JUL	269.0	125.0	46	356.0	132	55.0	20
HUMBOLDT RIVER at Comus	APR-JUL	229.1	92.0	40	346.0	151	27.0	12
S FORK HUMBOLDT RIVER at Dixie	APR-JUL	71.5	40.0	56	94.0	131	20.0	28
NF HUMBOLDT RIVER at Devils Gate	APR-JUL	34.3	19.0	55	48.0	140	5.0	15
MARY'S RIVER nr Deeth	APR-JUL	24.4	13.9	57	28.0	115	6.0	25
MARTIN CREEK nr Paradise Nv	APR-JUL	19.0	12.0	63	22.0	116	4.0	21
LAMOILLE CREEK nr Lamoille	APR-JUL	29.5	19.8	67	32.0	108	7.0	24
REESE RIVER nr Ione Nv	APR-JUL	7.8	4.7	60	11.0	141	1.0	13
L. HUMBOLDT RIVER nr Paradise Valley	APR-JUL	12.5	6.9	55	14.0	112	2.0	16
ROCK CREEK nr Battle Mtn.	APR-JUL	22.0	13.2	60	30.0	136	4.0	18

RESERVOIR STORAGE (1000AF)					WATERSHED SNOWPACK ANALYSIS		
RESERVOIR	USEABLE CAPACITY	USEABLE STORAGE THIS YEAR	USEABLE STORAGE LAST YEAR	USEABLE STORAGE AVE.	WATERSHED	NO. COURSES AVG'D	THIS YEAR AS % OF LAST YR. AVERAGE
RYE PATCH RESERVOIR	194.3	137.6	128.2	100.8	LAMOILLE CREEK	1	37 38
					S. FORK HUMBOLDT	4	37 47
					MARY'S RIVER	4	59 52
					N. FORK HUMBOLDT	4	41 48
					HUMBOLDT Rv. at Palisades	8	43 50
					HUMBOLDT RIVER at Comus	8	43 50
					LITTLE HUMBOLDT RIVER	2	59 56
					MARTIN CREEK	3	57 56
					REESE RIVER	0	0 0
					ROCK CREEK	3	41 38

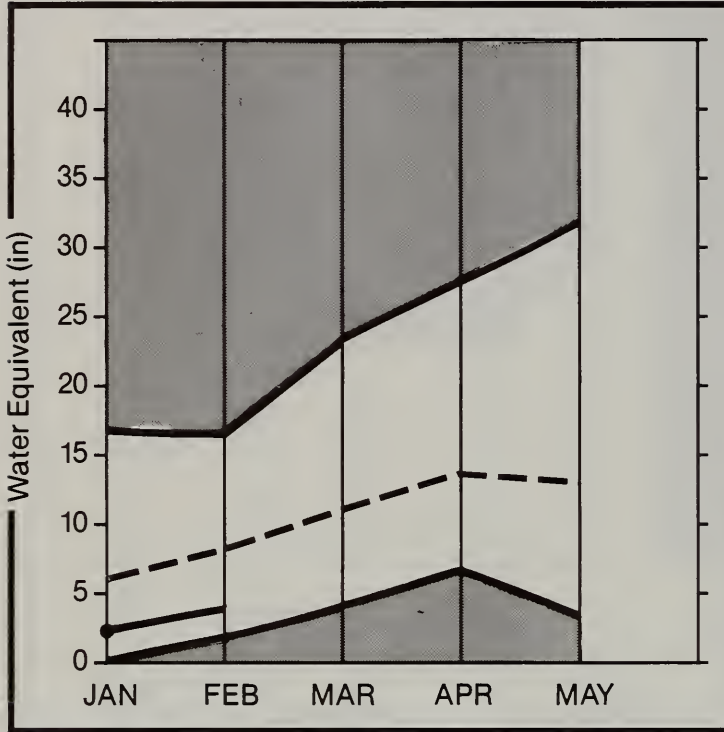
1 - Reas. max. and reas. min. forecasts are for 5% and 95% exceedance levels and also (2) below.

2 - Corrected for upstream diversions or changes in reservoir storage.

The average is computed for the 1961-85 base period.

# SNAKE & OUYHEE BASINS

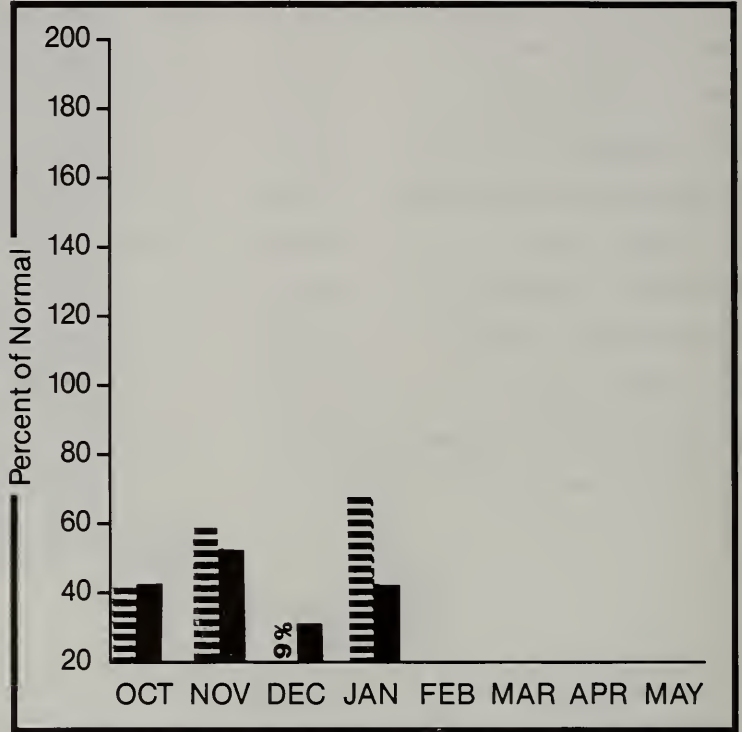
Mountain snowpack\* (inches)





\*Based on selected stations

Maximum  Average   
 Minimum  Current 

Precipitation\* (percent of normal)



\*Based on selected stations

Monthly precipitation  Year to date precipitation 

## WATER SUPPLY OUTLOOK:

Snow water content is well below average. Snowpack in the Snake is 48% of average and 53% of the amount of water in the snowpack last year at this time. The Owyhee snow water content is 57% of normal and 48% of last year. Precipitation during January was 67% of average, compared to 56% last year. Year to date precipitation is 42% of the 25-year average. Last year it was 82% of normal. Reservoir storage at Wildhorse is excellent with usable storage 50% over the average. Expected streamflows remain well below average. The Owyhee River near Owyhee is forecast at 40% of normal.

For more information contact your local Soil Conservation Service office.

# SNAKE & OWYHEE BASINS

## STREAMFLOW FORECASTS

FORECAST POINT	FORECAST PERIOD	25 YR. AVG. (1000AF)	MOST PROBABLE (1000AF)	MOST PROBABLE (% AVG.)	REAS. MAX. (1000AF)	REAS. MAX. (% AVG.)	REAS. MIN. (1000AF)	REAS. MIN. (% AVG.)
OWYHEE RIVER nr Gold Creek	APR-JUL	30.4	12.0	54	32.0	145	6.0	27
OWYHEE RIVER nr Owyhee	APR-JUL	86.0	34.0	40	88.0	102	16.0	19
S FORK OWYHEE nr White Rock, Nv	APR-JUL	83.0	47.0	57	99.0	119	8.0	10
SALMON FALLS CK nr San Jacinto	MAR-JUL	89.3	43.0	48	90.0	101	16.0	18

RESERVOIR STORAGE (1000AF)					WATERSHED SNOWPACK ANALYSIS		
RESERVOIR	USEABLE CAPACITY	USEABLE STORAGE THIS YEAR	USEABLE STORAGE LAST YEAR	USEABLE STORAGE AVG.	WATERSHED	NO. COURSES AVG'D	THIS YEAR AS % OF LAST YR. AVERAGE
WILDHORSE RESERVOIR	71.5	40.1	39.4	26.6	OWYHEE RIVER nr Owyhee	6	49 53
					OWYHEE Rv. nr Gold Creek	2	41 45
					S. FORK OWYHEE RIVER	6	49 53
					SALMON FALLS CREEK	4	59 52

1 - Reas. max. and reas. min. forecasts are for 5% and 95% exceedance levels and also (2) below.

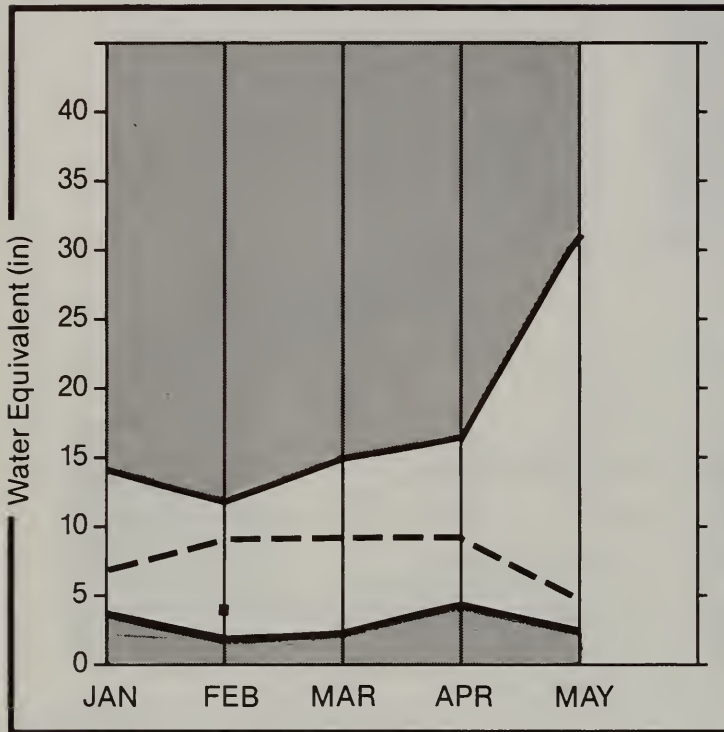
2 - Corrected for upstream diversions or changes in reservoir storage.

The average is computed for the 1961-85 base period.

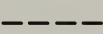



# EASTERN NEVADA

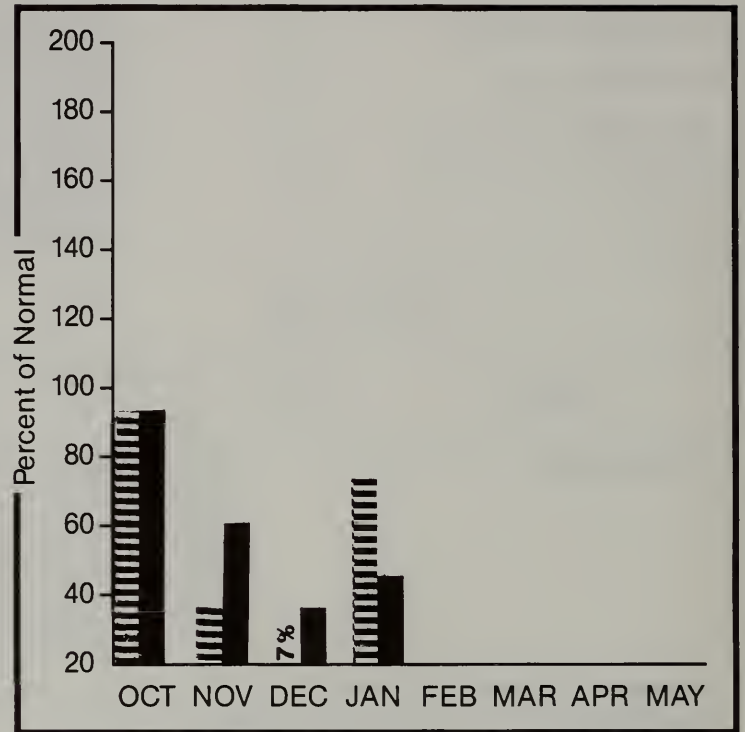
**Mountain snowpack\* (inches)**





\*Based on selected stations

Maximum  Average   
Minimum  Current 

**Precipitation\* (percent of normal)**



\*Based on selected stations

Monthly precipitation  Year to date precipitation 

## WATER SUPPLY OUTLOOK:

Snowpack accumulations are well below average. Water present in the snowpack is 43% of average compared to 71% last year. January precipitation was below normal at 73% of the 25-year average. Precipitation since October 1, 1986 is 46% of average. Last year's year to date precipitation was 78% of normal. Steptoe Creek near Ely is forecast well below average at 56% of average. The Franklin River is also expected to flow well below average at 70% of average during the April-July forecast period.

For more information contact your local Soil Conservation Service office.

# EASTERN NEVADA

## STREAMFLOW FORECASTS

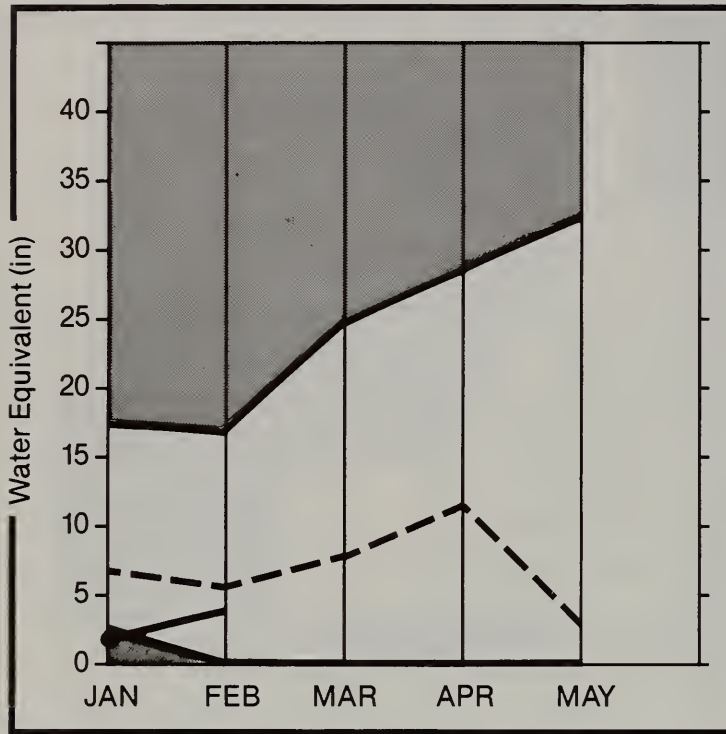
FORECAST POINT	FORECAST PERIOD	25 YR. AVG. (1000AF)	MOST PROBABLE (1000AF)	MOST PROBABLE (% AVG.)	REAS. MAX. (1000AF)	REAS. MAX. (% AVG.)	REAS. MIN. (1000AF)	REAS. MIN. (% AVG.)
STEPTOE CREEK nr Elv	APR-JUL	3.2	1.8	56	4.0	124	1.0	31
KINGSTON CREEK nr Austin, Nv	APR-JUL	4.2	3.2	76	6.0	142	1.0	24
FRANKLIN RIVER nr Arthur	APR-JUL	6.9	4.8	70	10.0	146	2.0	29

RESERVOIR STORAGE (1000AF)					WATERSHED SNOWPACK ANALYSIS		
RESERVOIR	USEABLE CAPACITY	USEABLE STORAGE THIS YEAR	USEABLE STORAGE LAST YEAR	USEABLE STORAGE AVG.	WATERSHED	NO. COURSES AVG'D	THIS YEAR AS % OF LAST YR. AVERAGE
					FRANKLIN RIVER	1	45 54
					KINGSTON CREEK	0	0 0
					EASTERN NEVADA	2	43 43
					STEPTOE VALLEY	2	43 43

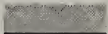
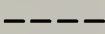
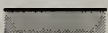

1 - Reas. max. and reas. min. forecasts are for 5% and 95% exceedance levels and also (2) below.  
 2 - Corrected for upstream diversions or changes in reservoir storage.  
 The average is computed for the 1961-85 base period.

# NORTHERN GREAT BASIN

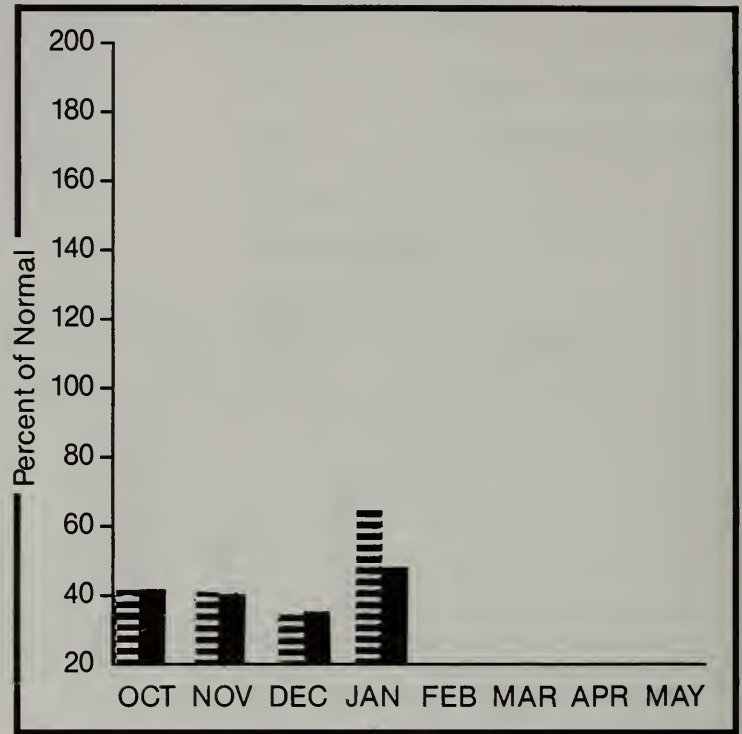
**Mountain snowpack\*** (inches)





\*Based on selected stations

Maximum  Average   
 Minimum  Current 

**Precipitation\*** (percent of normal)



\*Based on selected stations

Monthly precipitation  Year to date precipitation 

## WATER SUPPLY OUTLOOK:

Snow water content remains well below average with 64% of average in the western portion of the basin and 46% of average in the eastern portion. Last year's snowpack was 79% of normal in the west and 70% of normal in the east. Monthly precipitation and water year precipitation are well below average throughout the basin. Overall, streamflows in the basin are expected to be well below normal. Bidwell Creek near Fort Bidwell is forecast at 7500 acre feet of 63% of average.

For more information contact your local Soil Conservation Service office.



# NORTHERN GREAT BASIN

## STREAMFLOW FORECASTS

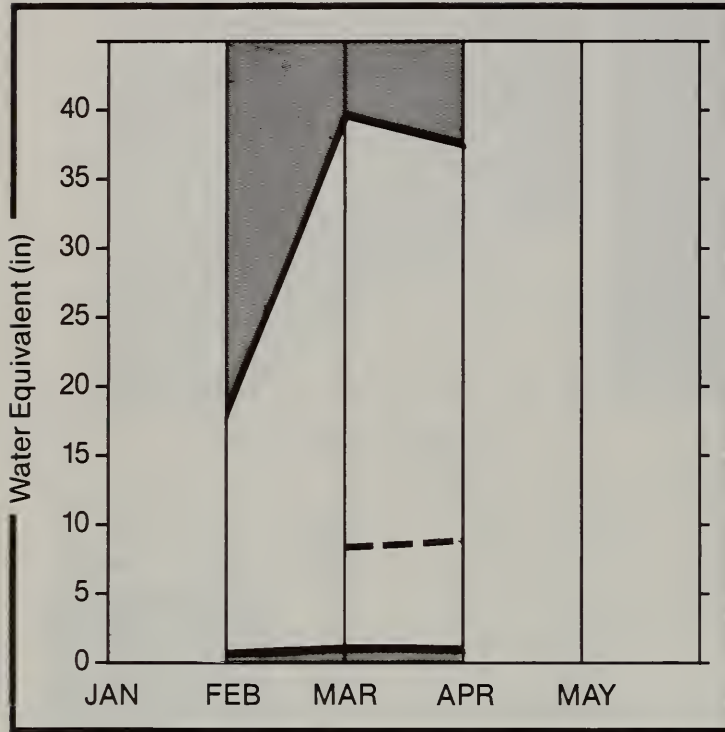
FORECAST POINT	FORECAST PERIOD	25 YR. AVG. (1000AF)	MOST PROBABLE (1000AF)	MOST PROBABLE (% AVG.)	REAS. MAX. (1000AF)	REAS. MAX. (% AVG.)	REAS. MIN. (1000AF)	REAS. MIN. (% AVG.)
BIDWELL CREEK nr Fort Bidwell	APR-JUL	12.0	7.5	63	15.0	125	2.0	17
DEEP CREEK nr Cedarville, Ca	APR-JUL	3.6	2.2	61	5.0	139	1.0	28
EAGLE CREEK nr Eagleville, Ca	APR-JUL	4.3	3.3	77	6.0	140	1.0	23
MILL CREEK nr Cedarville, Ca	APR-JUL	4.1	3.1	76	6.0	146	1.0	24
QUINN RIVER nr McDermitt, Nv	APR-JUL	16.0	9.0	56	18.0	113	2.0	13
E. FORK QUINN RIVER nr McDermitt	APR-JUL	10.4	5.2	50	11.0	106	2.0	19
MCDERMITT CREEK nr McDermitt	APR-JUL	14.4	5.7	40	14.0	97	2.0	14

RESERVOIR STORAGE (1000AF)					WATERSHED SNOWPACK ANALYSIS			
RESERVOIR	USEABLE CAPACITY	USEABLE STORAGE THIS YEAR	USEABLE STORAGE LAST YEAR	USEABLE STORAGE AVG.	WATERSHED	NO. COURSES AVG'D	THIS YEAR AS % OF LAST YR. AVERAGE	
					BIDWELL	4	96	72
					MILL CREEK	1	72	74
					DEEP CREEK	1	72	74
					EAGLE CREEK	1	72	74
					QUINN RIVER	2	70	46
					E. FORK QUINN	2	70	46
					MCDERMITT CREEK	2	70	46

1 - Reas. max. and reas. min. forecasts are for 5% and 95% exceedance levels and also (2) below.  
2 - Corrected for upstream diversions or changes in reservoir storage.  
The average is computed for the 1961-85 base period.

## SOUTHERN NEVADA

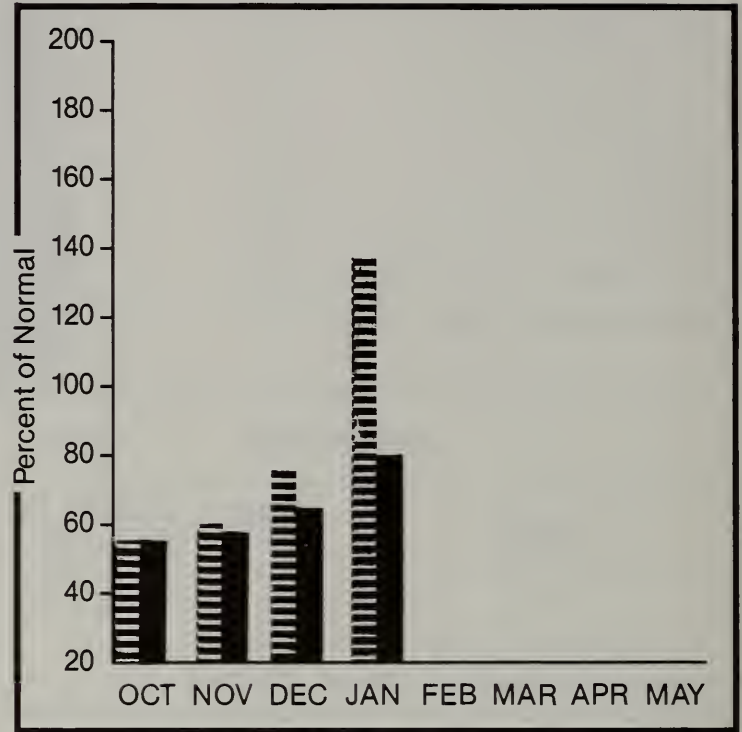
**Mountain snowpack\*** (inches)



\*Based on selected stations

Maximum Average   
 Minimum Current

**Precipitation\*** (percent of normal)



\*Based on selected stations

Monthly precipitation Year to date precipitation

### WATER SUPPLY OUTLOOK:

Snow water content in the snowpack supplying the Virgin River is about 48% of average. This year's snowpack is 62% of last year's snow water accumulation. January precipitation was well above average at 137% of normal. January 1986 precipitation was 76% of average. Water year precipitation remains below average. Water accumulation since October 1 is 79% of average. Last year's year to date precipitation was 80% of average at this time. Storage at Lake Mohave is 7% over the average and 4% more than last year. Lake Mead has 27% more water stored than normal and 6% more than last year.

For more information contact your local Soil Conservation Service office.

# SOUTHERN NEVADA

## STREAMFLOW FORECASTS

FORECAST POINT	FORECAST PERIOD	25 YR. AVG. (1000AF)	MOST PROBABLE (1000AF)	MOST PROBABLE (% AVG.)	REAS. MAX. (1000AF)	REAS. MAX. (% AVG.)	REAS. MIN. (1000AF)	REAS. MIN. (% AVG.)
VIRGIN RIVER near Hurricane, UT	APR-JUL	68.0	48.0	71	80.0	118	17.0	25
LAKE POWELL inflow	APR-JUL	8086.0	8500.0	105	12000.0	148	5430.0	67

RESERVOIR STORAGE (1000AF)					WATERSHED SNOWPACK ANALYSIS		
RESERVOIR	USEABLE CAPACITY	USEABLE STORAGE THIS YEAR	USEABLE STORAGE LAST YEAR	USEABLE STORAGE AVG.	WATERSHED	NO. COURSES AVG'D	THIS YEAR AS % OF LAST YR. AVERAGE
LAKE MOHAVE	1810.0	1718.0	1647.0	1603.0	VIRGIN Rv. at Littlefield	4	62 48
LAKE MEAD	26159.0	24432.0	23147.0	19301.0	VIRGIN Rv. at Hurricane	4	62 48

1 - Reas. max. and reas. min. forecasts are for 5% and 95% exceedance levels and also (2) below.  
 2 - Corrected for upstream diversions or changes in reservoir storage.  
 The average is computed for the 1961-85 base period.



# SNOW DATA MEASUREMENTS

SNOW COURSE	ELEVATION	DATE	SNOW DEPTH	WATER CONTENT	LAST YEAR	AVERAGE 1961-85
-----						
LAKE TAHOE						
ECHO PEAK (CA)	7800	2/03/87	---	10.8E	23.0	27.8
ECHO SUMMIT (CA)	7450	2/03/87	---	8.2E	15.9	22.1
FALLEN LEAF (CA)	6300	1/29/87	---	2.2E	3.5	6.5
FREEL BENCH (CA)	7300	1/30/87	15	3.4	5.7	8.6
GLENBROOK #2	6900	1/31/87	20	4.0	6.5	7.9
HAGANS MEADOW (CA)	8000	1/30/87	21	4.4	9.5	12.4
HEAVENLY VALLEY (CA)	8850	1/29/87	31	6.2	14.8	19.5
LAKE LUCILLE (CA)	8200	2/02/87	---	16.2E	--	39.1
MARLETTE LAKE	8000	1/30/87	29	6.9	14.7	14.5
RICHARDSONS #2 (CA)	6500	1/30/87	23	4.7	7.5	10.7
RUBICON #2 (CA)	7500	2/01/87	---	6.6E	13.8	24.4
TAHOE CITY CROSS(CA)	6750	1/26/87	18	4.1	10.8	13.3
TRUCKEE, UPPER (CA)	6400	1/30/87	12	2.8	4.9	6.9
WARD CREEK #2 (CA)	7000	1/29/87	43	10.7	20.8	26.6
WARD CREEK #3 (CA)	6750	2/03/87	44	12.6	18.1	23.5
TRUCKEE RIVER						
BIG MEADOWS	8300	2/03/87	21	5.1	13.0	19.1
BOCA #2 (CA)	5900	1/30/87	---	2.6E	--	4.4
BROCKWAY SUMMIT (CA)	7100	1/26/87	13	3.4	10.1	12.4
CASTLE CREEK (CA)	7400	1/30/87	49	12.7	31.5	33.8
DONNER PARK #2 (CA)	6000	1/26/87	---	3.3E	--	9.9
DONNER SUMMIT (CA)	6900	2/03/87	---	8.4E	24.0	24.8
FORDYCE LAKE (CA)	6500	1/29/87	46	12.9	21.4	24.3
FURNACE FLAT (CA)	6700	1/29/87	53	14.5	25.8	29.7
INDEPENDENCE CAMP CA	7000	2/03/87	23	5.4	10.8	14.5
INDEPENDENCE CREEK	6500	2/03/87	---	3.2E	7.4	8.3
INDEPENDENCE LAKE CA	8450	2/03/87	38	9.4	20.5	25.6
LITTLE VALLEY	6300	1/30/87	10	2.7	--	4.6
MT. ROSE	9000	2/03/87	12	2.5	12.4	20.2
MT. ROSE SKI AREA	9000	2/02/87	32	8.8	22.8	29.5
SAGEHEN CREEK (CA)	6500	2/03/87	---	4.0E	--	11.0
SQUAW VALLEY #2 (CA)	7500	1/29/87	41	10.4	25.9	32.5
SQUAW VALLEY G.C.,CA	8200	1/29/87	43	11.5	29.2	34.2
TAHOE CITY CROSS(CA)	6750	1/26/87	18	4.1	10.8	13.3
TRUCKEE #2 (CA)	6400	1/26/87	15	3.7	6.5	9.6

# SNOW DATA MEASUREMENTS (CONT)

SNOW COURSE	ELEVATION	DATE	SNOW DEPTH	WATER CONTENT	LAST YEAR	AVERAGE 1961-85
CARSON RIVER						
BLUE LAKES (CA)	8000	1/26/87	27	6.4	18.6	26.1
CARSON PASS, UP (CA)	8600	1/26/87	25	6.5	20.8	22.6
CLEAR CREEK	7300	2/02/87	17	3.9	--	7.3
EBBETTS PASS #2 (CA)	8700	1/30/87	---	8.9E	16.8	26.1
MONITOR PASS AM(CA)	8350	1/29/87	18	3.6	9.9	--
POISON FLAT #2 (CA)	7900	1/29/87	24	5.0	8.8	11.6
WET MEADOWS #2 (CA)	8100	1/30/87	---	6.4E	23.4	25.9
WALKER RIVER						
CENTER MOUNTAIN (CA)	9400	1/29/87	---	7.1E	--	23.2
LEAVITT LAKE (CA)	9400	1/29/87	35	8.4	26.1	30.7
LEAVITT MEADOWS (CA)	7200	1/29/87	7	1.3E	4.5	6.8
LOBDELL LAKE (CA)	9200	1/29/87	29	4.4E	7.5	12.0
SAWMILL RIDGE (CA)	8750	1/29/87	23	2.8	9.6	13.4
SONORA PASS (CA)	8800	1/29/87	25	4.9	13.0	16.9
TIOGA PASS (CA)	9900	1/31/87	19	4.9	16.6	18.4
VIRGINIA LAKES (CA)	9500	1/29/87	17	2.8	7.3	11.2
VIRGINIA LAKES RIDGE	9200	1/29/87	20	4.9	9.5	11.4
WILLOW FLAT (CA)	8250	1/29/87	16	2.7	7.3	7.6
NORTHERN GREAT BASIN						
BARBER CREEK (CA)	6500	1/29/87	19	4.5	8.4	8.0
CEDAR PASS (CA)	7100	1/28/87	28	7.6	10.6	10.3
DISASTER PEAK	6500	2/01/87	---	3.55	6.4	10.4
DISMAL SWAMP #2 (CA)	7000	1/29/87	44	12.3	8.6	18.5
FORTY-NINE MOUNTAIN	6000	1/30/87	12	2.5	3.1	3.1
HAYS CANYON	6400	1/29/87	7	1.4	.0	2.7
RESERVATION CR. (CA)	5900	1/30/87	23	7.5	5.7	7.8
BALD MOUNTAIN AM	6720	1/29/87	3	.6	.0	2.1
DISASTER PEAK	6500	2/01/87	---	3.55	6.4	10.4
LITTLE BALLY MTN. AM	6000	1/29/87	6	1.2	1.2	2.6
QUINN RIDGE AM	6300	2/04/87	9	1.2E	--	1.5
SNAKE RIVER						
BEAR CREEK	7800	2/01/87	---	6.0E	11.8	13.5
GOAT CREEK	8800	2/01/87	---	5.4E	9.9	11.7
HUMMINGBIRD SPRING	8950	2/01/87	---	8.9E	--	15.5
JAKES CREEK AM	7000	1/29/87	10	1.4	5.2	3.7
MERRIT MOUNTAIN AM	7000	1/29/87	12	1.7	4.5	5.0
POLE CREEK R.S.	8330	2/01/87	---	8.2E	11.3	13.0
SEVENTYSIX CREEK	7100	2/01/87	---	4.5E	7.7	8.3
STAG MOUNTAIN AM	7700	1/29/87	12	1.7	3.8	3.7

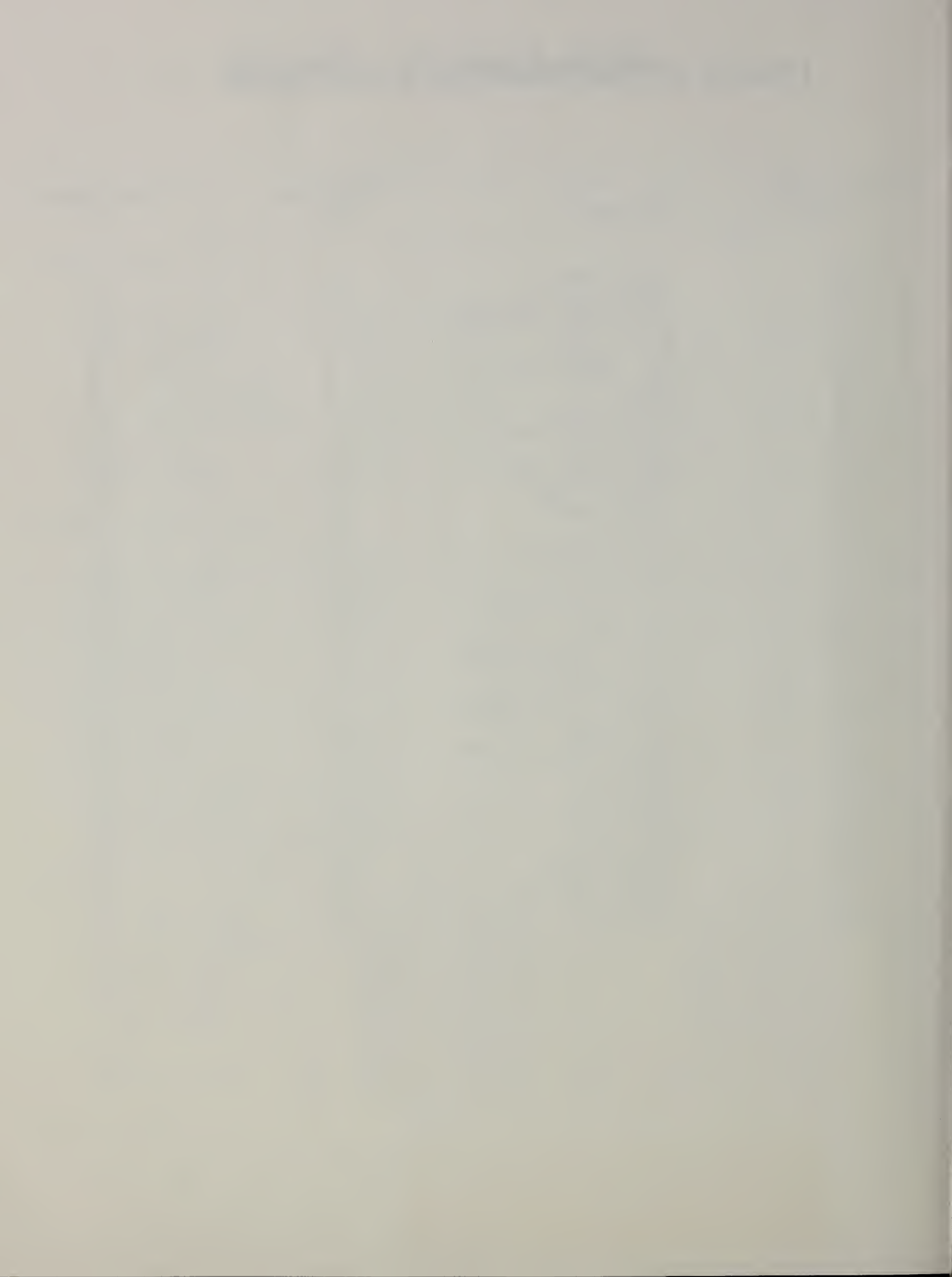
# SNOW DATA MEASUREMENTS (CONT)

SNOW COURSE		ELEVATION	DATE	SNOW DEPTH	WATER CONTENT	LAST YEAR	AVERAGE 1961-85
OWYHEE RIVER							
BIG BEND		6700	1/29/87	14	2.0	8.0	6.2
COLUMBIA BASIN	AM	6650	1/29/87	21	3.4	6.0	3.5
FAWN CREEK #2		7050	2/01/87	---	5.3E	13.2	12.5
GOLD CREEK		6600	1/29/87	10	1.30	--	3.7
JACK CREEK, LOWER		6800	1/28/87	16	2.6	--	2.6
JACK CREEK, UPPER		7250	1/28/87	23	4.2	4.0	5.3
JACK CREEK #2, UPPER		7280	1/28/87	33	6.8	9.4	17.9
JACKS PEAK		8420	2/01/87	---	9.1E	--	14.4
LAUREL DRAW		6700	2/01/87	---	4.9E	10.1	5.8
TAYLOR CANYON		6200	1/28/87	11	1.4	5.2	4.1
HUMBOLDT RIVER, UPPER							
AMERICAN BEAUTY	AM	7800	1/29/87	9	1.8	7.3	5.7
CORRAL CANYON		8500	2/01/87	---	3.9E	11.7	8.2
DORSEY BASIN		8100	2/01/87	---	4.2E	9.4	7.8
DRY CREEK		6500	1/29/87	---	2.1E	--	3.5
GREEN MOUNTAIN		8000	2/01/87	---	4.2E	11.7	3.8
LAMOILLE #1		7100	1/27/87	13	2.4	--	5.9
LAMOILLE #3		7700	1/27/87	15	3.1	8.4	8.1
LAMOILLE #5		8700	1/27/87	31	6.6	--	17.9
ROBINSON LAKE	AM	9200	1/29/87	24	5.3	19.4	19.5
RYAN RANCH		5800	1/29/87	---	.3E	--	1.3
SMITH CREEK		7700	2/01/87	---	5.1E	--	--
TENT MTN, LOWER	AM	7000	1/29/87	11	2.1	7.8	8.5
TENT MTN, UPPER	AM	8350	1/29/87	29	6.4	10.3	15.1
TREMEWAN RANCH		5700	1/29/87	4	.6	3.0	1.5
TROUT CREEK, UPPER	AM	8500	1/27/87	---	5.1E	--	9.4
HUMBOLDT RIVER, LOWER							
BIG CREEK MINE		7600	2/01/87	0	.0E	--	3.4
BIG CREEK, UPPER		7800	2/01/87	---	.5E	--	3.8
BUCKSKIN, LOWER		6700	2/01/87	---	1.9E	--	5.3
GOLCONDA #2		6000	2/01/87	---	2.0E	--	5.7
GRANITE PEAK		7800	2/01/87	---	6.4E	7.8	11.3
LAMANCE CREEK		6000	2/01/87	---	4.5E	--	6.9
MARTIN CREEK		6700	2/01/87	---	3.4E	6.6	6.2
MIDAS		7200	1/29/87	0	.0	2.4	2.9
SNOWSTORM MTN	AM	7420	1/29/87	25	3.5	8.3	14.7
TOE JAM AM	AM	7700	1/29/87	12	2.0	4.7	7.4
EASTERN NEVADA							
BERRY CREEK		9100	2/01/87	---	3.8s	10.2	8.9



# SNOW SAMPLES - DRI-ASC

ELEVATION FEET	SITE NAME	SNOW DEPTH (IN.)	WATER CONTENT (IN.)
5800	Clear Creek	Ø	Ø
7260	Spooner Summit	22.5	5.5
5250	Cliff Ranch, Franktown	Ø	Ø
6540	Little Valley	11.5	4.4
5160	Davis Creek	Ø	Ø
4590	Jct. 395 & NV 27	Ø	Ø
5110	Lancer	Ø	Ø
5670	Whites Creek	Ø	Ø
5700	Evergreen Hills Rd.	3.5	1.8
6000	Jones Creek	3.0	1.4
6400	RNR Forestry Site	10.0	3.2
7060	Reindeer Lodge	11.0	3.5
7440	Galena Creek	21.0	5.5
7620	Sky Tavern	14.0	3.2
8280	Mt. Rose Resort	21.5	6.0
8820	Tamarack Lake	17.5	4.8
8540	Tahoe Meadows	33.0	9.4
8000	Below Incline Lake	20.0	6.4
7300	Apollo Way	11.0	3.7
6235	Third & Incline Creeks	Ø	Ø
7200	Brockway Summit	20.0	4.8
6320	North Star Fire Dept.	9.0	2.9
5900	Truckee - Tahoe Airport	4.0	1.7
6540	Cabin Creek	16.0	4.2
6240	Squaw Valley Fire Dept.	17.0	5.6
6200	Thunder Cliff	15.0	4.9
6240	Tahoe City	13.5	4.6
6200	Bennett Flat	16.0	5.0
6960	Alder Creek	32.0	9.7
5850	Hobart Mills	8.5	3.0
6340	Sagehen Creek	24.0	8.0
6410	Hennes Past Jct.	15.5	3.5
6200	Fuller Lake	4.5	1.5
6000	Joy Lake	Ø	Ø



## The Following Organizations Cooperate With The Soil Conservation Service In Snow Survey Work

### STATE

California Cooperative Snow Surveys  
California Department of Parks and Recreation  
California Department of Water Resources  
Colorado River Commission of Nevada  
Idaho Cooperative Snow Surveys  
Nevada Association of Conservation Districts  
Nevada Department of Conservation & Natural Resources  
    Division of Water Resources  
    Nevada State Forester  
    Division of Conservation Districts  
Oregon Cooperative Snow Surveys  
University of Nevada, Desert Research Institute  
Utah Cooperative Snow Surveys

### FEDERAL

Bureau of Reclamation  
Forest Service  
Geological Survey  
Soil Conservation Service  
U.S. District Court - Federal Water Master  
NOAA, National Weather Service

### PRIVATE

Nevada Irrigation District  
Owyhee Project North Board of Control  
Owyhee Project South Board of Control  
Pacific Gas and Electric Company  
Pershing County Water Conservation District  
Sierra Pacific Power Company  
Truckee - Carson Irrigation District  
Walker River Irrigation District  
Washoe County Water Conservancy District

Other organizations and individuals furnish valuable information for the snow survey reports. Their cooperation is gratefully acknowledged.



UNITED STATES DEPARTMENT OF AGRICULTURE  
SOIL CONSERVATION SERVICE  
1201 TERMINAL WAY, SECOND FLOOR  
RENO, NEVADA 89502

OFFICIAL BUSINESS  
PENALTY FOR PRIVATE USE, \$300

THIRD CLASS BULK RATE  
POSTAGE AND FEES PAID  
USDA • SCS

PERMIT NO G-267

**THIRD CLASS MAIL**

**Nevada  
Water Supply Outlook**

and

Federal — State — Private  
Cooperative Snow Surveys



SOIL CONSERVATION SERVICE

USDA, NAT'L AGRICULTURAL LIB  
SERIALS CONTROL, ROOM 002

BELTSVILLE, MD

20705